

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2018 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including USACE Erosion Survey**

**Sacramento River Basin**

<b>NA0021</b>	Overall LMA Rating	Total LMA Miles						
<b>Yolo County Department of Natural Resources</b>	<b>U</b>	<b>0.59</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.01	0.08	0.33	56.23%				
Encroachments	0.01		0.01	1.70%	0.01			
Animal Control	0.03	0.01	0.07	11.93%				
Slope Stability	0.01		0.01	1.70%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.01			
<i>LMA Totals:</i>	0.06	0.09	0.42	71.57%	0.02	0.00	0.00	0.00
<b>Unit No. 01 Right Bank Cache Creek RB</b>	Overall Unit Rating	Total Unit Miles						
<b>NA0021</b>	<b>U</b>	<b>0.59</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.01	0.08	0.33	56.23%				
Encroachments	0.01		0.01	1.70%	0.01			
Animal Control	0.03	0.01	0.07	11.93%				
Slope Stability	0.01		0.01	1.70%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.01			
<i>Unit Totals:</i>	0.06	0.09	0.42	71.57%	0.02	0.00	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections****LMA District Cover Sheet****Fall 2018 Levee Inspection Results****Yolo County Department of Natural Resources**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			U	

\*\* Non-receipt of Summer or Winter Inspection  
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

**FALL INSPECTIONS:** The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2018 Levee Inspection Results**

**Yolo County Department of Natural Resources**

Waterway			Bank	Unit Miles
Unit No. 01 Right Bank Cache Creek			Right	0.59
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>U</b>	
Date of Inspection	3/7/2018 - 3/7/2018		9/28/2018 - 9/28/2018	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By	Casey Leibler o County Department of Natural Resources		Casey Leibler o County Department of Natural Resources	
			Thomas Engler MBK	

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_NA0021_01_s_2012_5				
Comment Code					
Inspector Comment					
Yolo County has copies of the O&M manual.					

No Photos

LM Start		Rating **	A	Issue No.	11
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_NA0021_01_s_2018_11				
Comment Code					
Inspector Comment					
Yolo County OES maintains a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	12
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
DWR ID	DWR_NA0021_01_s_2012_12				
Comment Code					
Inspector Comment					
Yolo County OES has a written response plan and response training.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	0.03	Rating **	U	Issue No.	23
LM End	0.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.720892 °	38.721020 °
				-121.810421 °	-121.809792 °
DWR ID	DWR_NA0021_01_s_2017_23				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Thick vegetation on waterside slope.					

Photo 1 of 2 : FA\_2018\_NA0021\_351\_23\_20180904\_00017.jpg



Wild vegetation on the waterside levee slope, blocking visibility. Spring 2018.

LM Start	<b>0.03</b>	Rating **	U	Issue No.	<b>23 (cont)</b>
LM End	<b>0.07</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2018\_NA0021\_351\_23\_20180904\_00018.jpg



Wild vegetation on waterside levee slope, blocking visibility. Spring 2017.

LM Start	0.03	Rating **	M	Issue No.	15
LM End	0.03	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.720895 °	38.720895 °
				-121.810408 °	-121.810408 °
DWR ID	DWR_NA0021_01_f_2015_15				
Comment Code					
DE : Debris					
Inspector Comment					
Concrete pipes on waterside slope.					

Photo 1 of 1 : FA\_2018\_NA0021\_351\_15\_20180904\_00008.jpg



View of the debris on the waterward side of the levee. Fall 2015.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**


Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola


Photo 1 of 1 : FA\_2018\_NA0021\_351\_6\_20181001\_00022.jpg



09-28-2018

View of the vegetation on the waterside slope. Fall 2018.


Photo 1 of 1 : FA\_2018\_NA0021\_351\_9\_20181001\_00023.jpg



09 28 2018

View of the longitudinal cracking on the crown and waterside slope. Fall 2018.

Photo 1 of 3 : FA\_2018\_NA0021\_351\_16\_20180904\_00009.jpg



An updated view of rodent holes on LS slope. Fall inspection 10/07/2016

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable	A : Acceptable                      N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable            C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable                      A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	0.19	Rating **	U	Issue No.	16 (cont)	
LM End	0.19	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			38.721536 °		38.721536 °
				-121.807711 °		-121.807711 °
DWR ID	DWR_NA0021_01_s_2015_16					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

Photo 2 of 3 : FA\_2018\_NA0021\_351\_16\_20180904\_00010.jpg



View of the rodent hole on the landward side of the levee looking downstream. Spring 2015.

LM Start	<b>0.19</b>	Rating **	U	Issue No.	<b>16 (cont)</b>
LM End	<b>0.19</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2018\_NA0021\_351\_16\_20180904\_00011.jpg



View of the rodent holes on the landward side of the levee looking downstream. Spring 2016.

LM Start	0.20	Rating **	M	Issue No.	7
LM End	0.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.721683 °	38.721683 °
				-121.807532 °	-121.807532 °
DWR ID	DWR_NA0021_01_s_2016_7				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : FA\_2018\_NA0021\_351\_7\_20180904\_00005.jpg



Perspective view of the rodent hole on the landward side of the levee looking downstream. Spring 2016.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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# Yolo County Department of Natural Resources

View of the rodent holes on the landward side of the levee looking downstream. Spring 2016.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	0.24	Rating **	M	Issue No.	24	
LM End	0.24	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.722162 °	38.722162 °	
				-121.807223 °	-121.807223 °	
DWR ID	19554					
Comment Code						
Inspector Comment						
FS_ID:39855 DS_ID:19554 EP_NO: 6790 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Need to contact owner to determine if crossing is still active and to determine last inspection date. Will need copy of letter showing crossings passed inspection. FIELD_STRUCT_DESC: 6-inch steel natural gas pipeline through the levee, 4 feet below the crown. Pipe extends from borrow area and under the channel. Bleeder valve on the waterside (WS) bank. Service vault located on the landside (LS) next to access gate. Paved access ramp on the LS slope. (Plans to lower a 6-inch high-pressure gas main crossing Cache Creek authorized under Permit No. 6790, 1969 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 4/16/2013						

LM Start	<b>0.24</b>	Rating **	M	Issue No.	<b>24 (cont)</b>
LM End	<b>0.24</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_39855\_69553.jpg



View of landward side near access gate. Gas line marker located on between trees. Line runs parallel to access roadway and through levee.

Photo 2 of 3 : UCIP\_FA\_2018\_39855\_69554.jpg



Service vault located on landward toe near gate access gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	0.24	Rating **	M	Issue No.	24 (cont)	
LM End	0.24	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.722162 °	38.722162 °	
				-121.807223 °	-121.807223 °	
DWR ID	19554					
Comment Code						
Inspector Comment						
FS_ID:39855						
DS_ID:19554						
EP_NO: 6790						
Repair Type: Non-Urgent						
Crossing Status: Indicator Found						
UCIP Comments: Need to contact owner to determine if crossing is still active and to determine last inspection date. Will need copy of letter showing crossings passed inspection.						
FIELD_STRUCT_DESC: 6-inch steel natural gas pipeline through the levee, 4 feet below the crown. Pipe extends from borrow area and under the channel. Bleeder valve on the waterside (WS) bank. Service vault located on the landside (LS) next to access gate. Paved access ramp on the LS slope. (Plans to lower a 6-inch high-pressure gas main crossing Cache Creek authorized under Permit No. 6790, 1969 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2004].						
FS Date: 4/16/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_39855\_69555.jpg



View of gas line marker located on levee crown.

LM Start	0.27	Rating **	C	Issue No.	4
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.722520 °	38.722520 °
				-121.806991 °	-121.806991 °
DWR ID	DWR_NA0021_01_s_2012_4				
Comment Code					
PR : Prunings					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	0.27	Rating **	M	Issue No.	18
LM End	0.27	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.722615 °	38.722615 °
				-121.806952 °	-121.806952 °
DWR ID	DWR_NA0021_01_s_2015_18				
Comment Code					
EQ : Equipment					
Inspector Comment					

Photo 1 of 2 : FA\_2018\_NA0021\_351\_18\_20180904\_00012.jpg



Updated picture of equipment near LS toe of the levee. Fall inspection 10/07/2016.

LM Start	<b>0.27</b>	Rating **	M	Issue No.	<b>18 (cont)</b>
LM End	<b>0.27</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2018\_NA0021\_351\_18\_20180904\_00013.jpg



View of equipment on the landward side of the levee looking downstream. Spring 2015.

LM Start	0.27	Rating **	M	Issue No.	22
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.722620 °	38.722620 °
				-121.806958 °	-121.806958 °
DWR ID	DWR_NA0021_01_f_2015_22				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Unauthorized vehicle ramp by owner.					

Photo 1 of 3 : FA\_2018\_NA0021\_351\_22\_20180904\_00014.jpg



Perspective view of the trail on the waterward side of the levee looking downstream. Fall 2015.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	0.27	Rating **	M	Issue No.	22 (cont)	
LM End	0.27	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			38.722620 °		38.722620 °
				-121.806958 °		-121.806958 °
DWR ID	DWR_NA0021_01_f_2015_22					
Comment Code						
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.						
Inspector Comment						
Unauthorized vehicle ramp by owner.						

Photo 2 of 3 : FA\_2018\_NA0021\_351\_22\_20180904\_00015.jpg



View of the trail on the waterward side of the levee. Fall 2015.

LM Start	<b>0.27</b>	Rating **	M	Issue No.	<b>22 (cont)</b>
LM End	<b>0.27</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA\_2018\_NA0021\_351\_22\_20180904\_00016.jpg



The trail seems to be an access point that leads down to Cache Creek. Fall 2015.

LM Start	0.27	Rating **	M	Issue No.	14
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.722633 °	38.722633 °
				-121.806938 °	-121.806938 °
DWR ID	DWR_NA0021_01_s_2012_14				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Yolo County Department of Natural Resources**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	09/28/2018 09/28/2018	Zach Jojola

LM Start	<b>0.45</b>	Rating **	M	Issue No.	<b>3</b>							
LM End	<b>0.45</b>	Issue Type +	Ma	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Animal Control		38.725115°	38.725115°								
			-121.806527°	-121.806527°								
DWR ID	DWR_NA0021_01_f_2017_3											
Comment Code												
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.												
Inspector Comment												

Photo 1 of 1 : FA\_2018\_NA0021\_351\_3\_20180904\_00001.jpg



Rodent holes on landward hinge point. Fall 2017.

LM Start	<b>0.48</b>	Rating **	C	Issue No.	<b>2</b>							
LM End	<b>0.48</b>	Issue Type +	En	Location *	WS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Encroachments		38.725562°	38.725562°								
			-121.806528°	-121.806528°								
DWR ID	DWR_NA0021_01_s_2018_2											
Comment Code												
FW : Firewood												
Inspector Comment												

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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